## **Chapter 1. Introduction**

## 1.1 Location of the Project Area

The proposed project comprises all coastal and island areas of California. The California coast can be divided into three regions, each of which has different oceanographic characteristics, biogeography, and abalone species (Figure 1-1):

- The northern California region, which extends from the California-Oregon border south to San Francisco Bay, excluding the Farallon Islands
- The central California region, which extends from San Francisco Bay, including the Farallon Islands, south to Point Conception
- The southern California region, which extends from Point Conception to the California-Mexico border, including the southern California offshore islands

The historic distribution of individual species of abalone, *Haliotis* spp., varies in California (Figure 1-2). Green abalone, *Haliotis fulgens*; pink abalone, *H. corrugata*; and white abalone, *H. sorenseni*, are primarily found in the southern California region. Pinto abalone, *H. kamtschatkana* (including *H.k. assimilis*), is found in all three regions, as are black abalone, *H. cracherodii*, and flat abalone, *H. walallenis*. Red abalone, *H. rufescens*, is also found in all three regions, but its distribution in the southern region is restricted to areas where upwelling of cooler, deep water occurs. The threaded abalone *H. assimilis*, once thought to be a separate species, has been made synonymous with the pinto abalone, *H. kamtschatkana* (Geiger 2000).

## 1.2 Purpose and Need for Action

The Department is required by the State Legislature to prepare an ARMP for all of California's abalone [Fish and Game Code (FGC) §5520]. The purpose of the ARMP is to provide a cohesive framework to direct recovery and manage existing and future fisheries. The ARMP serves to prioritize short-term and identify long-term assessment, research, regulatory, and enforcement activities. Integration of these activities ensures effective sharing of available Department resources between recovery and management.

The history of the California abalone fishery points to the need for defined recovery and management guidelines. Five species of abalone (red, pink, green, black, and white) were fished along the coastline of California for both sport and commercial uses. However, the abalone species in central and southern California experienced stock collapse due to both natural and human-related causes, resulting in the 1997 closure of all abalone fishing in those areas. The only abalone fishery currently open in the state is the northern California red abalone sport fishery.

The five formerly-fished species in central and southern California are at risk of further population declines and, in one case, extinction. The white abalone has been listed as an endangered species under the federal Endangered Species Act, while the black abalone is a candidate for listing. Without human intervention, and possibly even with it, these species may never recover. The recovery portion of the ARMP is directed at preventing further population declines and helping rebuild populations.

For the only remaining abalone fishery (the northern red abalone sport fishery), it is critical to maintain a sustainable resource. In the future, some of the depleted abalone species may recover to levels considered sustainable for fishing. Therefore, the management portion of the ARMP addresses the current red abalone sport fishery as well as any sport or commercial fisheries that may be re-opened in the future. The management plan is meant to be adaptive in response to changes in stock conditions resulting from either natural or human-induced causes.

## 1.3 Specific Goals of the Plan

As the trustee agency for the State's fish and wildlife resources, the Department's overall goal is to manage those resources for optimum long-term benefits for the people of the State.

For the recovery portion of the ARMP, the interim goals are to reverse declines in populations by stabilizing stocks (prevent extinction in California waters), and establish self-sustaining populations range-wide. The long-term goal is to attain resource levels that can sustain a fishery.

For the management portion of the ARMP, the interim goal is to institute an adaptive plan that employs a precautionary approach to managing the existing red abalone fishery in northern California using available Department resources and data. The long-term goal is to implement a plan incorporating tag-based, zonal management using more extensive data collection, which would allow for more refined and responsive regulatory actions. Once implemented, the long-term goal should apply to all California abalone fisheries.